

## Construction of the final test versions

The ELPAC final test versions were constructed in June and July 2007 and released on the ELPAC test server as planned - on 31 July 2007. Access to the test versions will be granted only to accredited ELPAC Test Administrators. The necessary prerequisite for becoming the ELPAC Test Administrator for a EUROCONTROL / ECAC Member State is a successful completion of the accreditation workshop (including the self-study preparation).

### 1 Paper 1- Listening comprehension

Two test versions were published on the ELPAC test server for immediate use. There are many more items ready to be released. This will be done on a regular basis to ensure that test items are not known among the testing population. Each version will be used only on a limited number of test takers. Once this number is achieved, the respective test version will be withdrawn and replaced by a new one.

#### 1.1 *Selecting items for Paper 1 versions*

There were five trialling exercises (November 2005, March 2006, October 2006, March 2007 and May 2007), each trialling two test versions of Paper 1. All trialling exercises were followed by a thorough item / test analysis which included statistical findings and feedback from stakeholders (test takers, administrators, developers, etc). The first test versions (triated in November 2005) had a slightly different format (7 test parts) and did not provide enough time for the test takers to read and answer test questions. That is why the test format was changed and time to read and answer questions increased several times during the trialling exercises. All test versions trialled had high reliability. The versions trialled in May 2007 show a slightly lower reliability (yet still acceptable) but this seems to be caused by a smaller number of candidates.

<b>Test version</b>	<b>Reliability (Cronbach's Alpha)</b>	<b>Number of test takers</b>
Version A – November 2005	0.800	105
Version B – November 2005	0.870	96
Version C – March 2006	0.935	130
Version D – March 2006	0.940	128
Version G – October 2006	0.934	204
Version H – October 2006	0.929	204
Version L – March 2007	0.921	196
Version M – March 2007	0.923	196
Version P – May 2007	0.892	52
Version Q – May 2007	0.875	52

It has to be noted that not all test versions trialled consisted of new items. Most items had to be re-trialled, some items (and marking keys) were updated, time to read and answer questions was increased. Certain audio files were amended. All this led to changes in the test and thus everything had to be trialled again.

Test items also went through standard setting where English and subject matter experts who were not involved in the item writing assigned levels of difficulty and provided more feedback on individual items.

The test developers then collated all information from trialling analyses and standard setting exercises and selected items which performed well. The final test versions were constructed according to the following criteria:

- item difficulty
- content
- length of individual snippets
- specific language functions assigned to test items

Parallel test versions were produced, taking into consideration all of the above listed criteria.

### **1.2 Paper 1 pass mark**

The pass mark was set during the standard setting exercises and specifies a minimum number of items at each level which have to be answered correctly in order to achieve level 4 or level 5. In general terms, a 70% pass mark is required. But, as there is no compensation, in order to be awarded level 5 a candidate has to answer correctly at least 70% of level 4 items and at least 70% of level 5 items.

Paper 1 test will be marked by an accredited marker. Each item on the ELPAC test server was tagged with a level of difficulty which resulted from the trialling analysis and standard setting outcomes. All test versions comprise the same numbers of items at different difficulty levels.

ELPAC markers will not know what level was assigned to individual items. The final level is calculated by the ELPAC testing system, using an algorithm of how many items on each level have to be answered correctly in order to achieve level 4 or level 5.

### **1.3 Construction of future Paper 1 test versions**

ELPAC development will not stop with the release of the first test versions. New items will be written and trialled. At the end of the test each candidate will be encouraged to complete a short additional section. This is how new items will be trialled. It will take a maximum of 10 minutes and candidates will make their own decision whether to take the additional section or not.

The ELPAC system will employ an algorithm to ensure that each item is trialled on a representative sample of the target language population. All items will be analysed, reviewed and updated by the ELPAC project team. Where necessary, items will be re-trialled. The construction of future test versions will follow the

same criteria as the first test versions to ensure that the test versions are as parallel as possible.

## **2 Paper 2**

Fifteen test versions of Paper 2 (Task 1 and Task 2) were released on the server for immediate use. Task 1 provides a context appropriate to the individual controller's experience – tower, approach or en-route.

There are many more tasks ready to be released, this will be done on a regular basis to ensure that test tasks are not known among the testing population. Each version will be used only on a limited number of test takers. Once this number is achieved, the respective test version will be withdrawn and replaced by a new one.

### **2.1 Selecting tasks for Paper 2 versions**

There were four trialling exercises (May/June 2006, October 2006, March 2007 and May 2007), each trialling several versions of Paper 2. All trialling exercises were followed by a thorough task analysis which included analysis of the submitted recordings and feedback from stakeholders (test takers, administrators, examiners, developers, etc). Special care was given to the analysis of the recordings as the examiners received only limited training before each trial.

Task 1 provides specific context to tower, approach or en-route controllers and was trialled in this format. Task 2 was trialled with controllers of all ATC functions and then, based on the outcomes, individual tasks were assigned to be suitable either for all controllers or for controllers of particular experience (tower, approach, en route).

All tasks were reviewed and all updates re-trialled. Then, a thorough analysis was conducted again. As with Paper 1, Paper 2 tasks were also standard set. Again a group of English and subject matter experts not involved in task preparation was used.

Only after all tasks were trialled, re-trialled and standard set did the test developers collate information from all the analyses and construct the final test versions, making them as parallel in level of difficulty as possible.

### **2.2 Pass mark**

There are two examiners (ELE - English language expert and ATCO) in Paper 2, both having the role of interlocutor and assessor. ELPAC examiners can be accredited only after they successfully complete a 1-week accreditation workshop and the self study preparation.

The examiners use the ELPAC rating scale which is based on the ICAO scale (the only difference is the format making it more user-friendly for simultaneous use). The candidate is assessed in six criteria – pronunciation, structure, vocabulary, fluency, comprehension and interactions. The assessment is progressive as only by the end of Task 2 will the examiners have a rateable

sample of language enabling them to decide whether the candidate is at level 3, 4 or 5. The final level awarded is based on the lowest level awarded in any of the six criteria at the end of the test.

### ***2.3 Construction of future Paper 2 test versions***

ELPAC development will not stop with the release of the first test versions. New tasks will be written and trialled. Trialling will be arranged separately from Paper 1 and will be co-ordinated with ELPAC test users. All tasks will be analysed, reviewed and updated by the ELPAC project team. Where necessary, tasks will be re-trialled. The construction of the future test versions will follow the same criteria as the first test versions to ensure that the test versions are as parallel as possible.

## **3 ELPAC test pass mark**

To achieve a licence endorsement it is necessary to obtain a pass in both Paper 1 and Paper 2. There is no accumulative score. The lowest level achieved, in either Paper 1 or Paper 2, is the final assessment.

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